

# City of Newport News Stormwater Site Plan Worksheet



- Water Quality calculations must be completed using the runoff reduction method spreadsheet.
- Water Quantity calculations must be completed using the requirements in 9VAC25-870-66.
- The BMP Clearinghouse criteria must be used for the design, construction, maintenance, and operation of all BMP's. BMP layouts and details should be provided and accompany any installation and long term maintenance requirements within the plan set.
- Development cannot cause flooding to adjacent or downstream properties. Site development must take into account current drainage patterns and capacities of downstream systems. Including those that are City or VDOT maintained.
- A BMP Maintenance Agreement must be completed and recorded prior to site plan approval.
- The City of Newport News general notes, erosion and sediment control general notes, and minimum standards need to be provided on all site plans.
- Soil Borings reflecting BMP installation must be completed for all infiltration and biofiltration BMP's prior to site plan approval.
- Necessary construction permits must be obtained prior to any land disturbing activity. Failure to obtain these permits may result in a "STOP WORK" order being issued. As part of the Construction Permit process, the Storm Water Pollution Prevention Plan must be completed and submitted to the City's Engineering Department. This document must remain on site and be updated routinely to accurately reflect the up to date work on the site.
- For developments using technical criteria IIC under the "grandfathering" clause, proof of documentation needs to be submitted with the initial site plan submission. A description of why the site qualifies should be included in the site's storm water narrative.

## Overall Information

Site Plan Title: \_\_\_\_\_

Site Plan Address: \_\_\_\_\_

HUC: \_\_\_\_\_ Lat/Long: \_\_\_\_\_

Parcel Tax ID: \_\_\_\_\_

Parcel Area: \_\_\_\_\_

GPIN No (If available): \_\_\_\_\_

Owner: \_\_\_\_\_

Owner's Address: \_\_\_\_\_

## Site Breakdown

Total Limits of Disturbance: \_\_\_\_\_ sq. ft. \_\_\_\_\_ acre(s)

*Please list the land uses within the limits of disturbance.*

|                       | Pre<br>Development<br>Area (sq. ft.) | Pre<br>Development<br>Area (%) | Post<br>Development<br>Area (sq. ft.) | Post<br>Development<br>Area (%) |
|-----------------------|--------------------------------------|--------------------------------|---------------------------------------|---------------------------------|
| Forest/Open<br>Space  |                                      |                                |                                       |                                 |
| Managed Turf          |                                      |                                |                                       |                                 |
| Impervious<br>Surface |                                      |                                |                                       |                                 |

*Please note this worksheet is provided for informational purposes and is not intended to exempt the developer from reviewing and complying with the latest Federal, State, and Local regulations.*

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## Water Quality Requirements

| Criteria | Development Criteria                                    | Required Reduction   |
|----------|---|--|
| 1        | New Development   | Phosphorus load cannot exceed .41 pounds per acre per year   |
| 2        | $\geq 1$ acre with no net increase in impervious cover. | 20% Below pre-developed phosphorus load  |
| 3        | $< 1$ acre with no net increase in impervious cover.    | 10% Below pre-developed phosphorus load  |
| 4        | Net increase in impervious cover                        | 20% Below pre-developed phosphorus load for increased impervious, criteria 2 or 3 based on the disturbance outside of new impervious area. |
| 5        | Linear Development projects on prior developed lands    | 20% Below pre-developed phosphorus load  |

Chosen criteria: \_\_\_\_\_

Total Phosphorus Removal Required for site (lbs/yr): \_\_\_\_\_

## Storm Water Management Facility (BMP)

*The BMP Clearinghouse must be used for the design and designation of all Storm Water Management Facilities.*

Is BMP labeled and numbered on the site plan? ☐ Yes ☐ No

Is Low Impact Development Implemented? ☐ Yes ☐ No

Has the BMP Maintenance Agreement been filed? ☐ Yes ☐ No

If No, what is the status? \_\_\_\_\_

| BMP No. | Contributing Drainage Area (sq. ft.) | Type of BMP and DEQ Spec. No./Level | Eff. (%) | Phosphorus Removal (lb/yr) | Nitrogen Removal (lb/yr) | Water Quality Volume (cubic ft) | Water Quantity Volume (cubic ft) |
|---------|--------------------------------------|-------------------------------------|----------|----------------------------|--------------------------|---------------------------------|----------------------------------|
|         |                                      |                                     |          |                            |                          |                                 |                                  |
|         |                                      |                                     |          |                            |                          |                                 |                                  |
|         |                                      |                                     |          |                            |                          |                                 |                                  |
|         |                                      |                                     |          |                            |                          |                                 |                                  |
|         |                                      |                                     |          |                            |                          |                                 |                                  |

Total Phosphorus Removal Reduction for site (lbs/yr): \_\_\_\_\_

Amount Phosphorus Removed in Excess for site (lbs/yr): \_\_\_\_\_

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## Water Quantity Requirements

### Channel Protection

| Discharge point                       | 1 <sup>st</sup> Option  | 2 <sup>nd</sup> Option  |
|---------------------------------------|---|-------------------------|
| Manmade stormwater conveyance system  | Prove post- development peak flow rate of 2-yr storm without causing erosion.   | Energy Balance Equation |
| Restored stormwater conveyance system | Prove that the development is functioning in accordance with design objectives. | Energy Balance Equation |
| Natural stormwater conveyance system  | Energy Balance Equation.  | None                    |

Chosen Option (Please provide documentation on Plan Set): \_\_\_\_\_

*If the Energy Balance Equation is not used, analysis needs to be completed to a point where:*

- 1. The site's contributing drainage area is less than or equal to 1% of the total watershed*
- 2. The site's peak flow rate from the 1-year storm is less than or equal to 1% of the existing peak flow rate.*

*This analysis needs to be provided within the supplied calculations.*

### Flood Protection

| Discharge point   | 1 <sup>st</sup> Option  | 2 <sup>nd</sup> Option  |
|---|---|---|
| Concentrated stormwater that does not experience local flooding (10-yr storm) | Confine the postdevelopment peak flow rate for the 10-yr storm within the system. | None  |
| Concentrated stormwater that experiences local flooding (10-yr storm)         | Confine the postdevelopment peak flow rate for the 10yr storm within the system.  | Release a post development flow rate for the 10-yr storm event that is less than the predevelopment peak flow rate for the 10-yr storm. |

Chosen Option (Please provide documentation within calculation or on the Plan Set): \_\_\_\_\_

Pre-developed flow (cfs): \_\_\_\_\_ Post-developed flow (cfs): \_\_\_\_\_

*Unless the 2<sup>nd</sup> Option is chosen, analysis needs to be completed to a point where:*

- 1. The site's contributing drainage area is less than or equal to 1% of the total watershed*
- 2. The site's peak flow rate from the 10-year storm is less than or equal to 1% of the existing peak flow rate from the 10-yr storm prior to implementing control measures.*
- 3. The stormwater conveyance system enters a mapped floodplain.*

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